UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,739	01/24/2002	Masaaki Nishino	01USFP710-K.N.	4250

7590 10/22/2003

McGinn & Gibb, PLLC
Suite 200
8321 Old Courthouse Road
Vienna, VA 22182-3817

EXAMINER	
ANYASO, UCHENDU O	
ART UNIT	**PAPER NUMBER**
2675	

DATE MAILED: 10/22/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/053,739	NISHINO, MASAAKI	
	Examiner	Art Unit	
	Uchendu O Anyaso	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. **Claims 1-22** are pending in this action.

Claim Rejections - 35 USC ' 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. **Claims 1-7 and 10-22** are rejected under 35 U.S.C. 102(b) as being anticipated by *Fan* (U.S. 5,926,168).

Regarding **independent claims 1, 15, 16** and **22**, and for claims 20 and 21, Fan teaches a computer system 30 comprising a display screen 20, a pointing device 40 and buttons 41 (figure 1 at 20, 30, 40, 41).

Furthermore, Fan teaches that with the cursor 10 on display means 20 directly controlled by the user, the user can easily interact with the computer or interactive TV 30 with the press and release of one or a few select buttons 41 fixed on the pointing means 40 wherein the actions of these selection buttons 41 are coded with either infrared or electromagnetic waves, and is transmitted wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41).

Furthermore, Fan teaches how the pointing device emits a beam of light (figure 2).

Furthermore, Fan teaches how to determine the position on the display means 20 pointed by the pointing means 40 and input that position into the computer 30 as the position of the cursor 10 (column 6, lines 20-29).

Also, Fan teaches a position detecting unit by teaching angle detector 140, and electronic circuitry for using the light signal measured by the photo detector in the light scope to determine the position on the television screen pointed by said remote control, whereby the television can display the cursor at the position on the television screen pointed by said remote control (column 30, lines 5-12). This is accomplished in real time by the following mechanism: Angle detector 140 measures the angle 141 between the base line 160 and the line connecting the angle detector 140 and the light spot 130 wherein the angle detector 150 measures the angle 151 between the base line 160 and the line connecting the angle detector 150 and the light spot 130 such that the measured angles 141 and 151, along with the distance between angle detectors 140 and 150, are input into the computer or into a dedicated Digital Signal Processor (DSP) to calculate the coordinate of the light spot 130 wherein the calculated coordinated is taken as the position of the cursor 10 (column 6, lines 57-67, figure 2).

Regarding **claims 2 and 17**, in further discussion of claims 1 and 16, Fan teaches how the user can easily interact with the computer or interactive TV 30 with the press and release of one or a few select buttons 41 fixed on the pointing means 40 wherein the actions of these selection buttons 41 are coded with either infrared or electromagnetic waves, and is transmitted wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41).

Regarding **claims 3** and **18**, in further discussion of claims 1 and 16, Fan teaches how the display screen includes an LCD (column 5, lines 61-64).

Regarding **claim 4,** in further discussion of claim 3, Fan teaches that the light spot, on display means created by a light beam from pointing means, is measured with two arrays of photo detectors (240, 241) and a processing means in the form of a computer or dedicated DSP that is capable of processing the beam signals (column 7, lines 10-34, figure 3a at 240, 241; column 6, lines 61-67).

Regarding **claims 5** and **19**, in further discussion of claims 1 and 16, Fan teaches a spot on the display means at which sonic wave from pointing means is scattered, is measured by three sonic receivers (340, 350, 360) fixed on display means (figure 4, column 3, lines 54-56).

Regarding **claim 6**, in further discussion of claim 5, Fan teaches two arrays of photo detectors (240, 241) arranged in row and column fashion (figure 3a at 240, 241; column 6, lines 61-67).

Regarding **claim 7,** in further discussion of claim 6, Fan teaches how the display screen includes a CRT display (column 5, lines 61-64).

Regarding **claims 10-14,** in further discussion of claim 6, Fan teaches a position detecting unit by teaching angle detector 140, and electronic circuitry for using the light signal measured by the photo detector in the light scope to determine the position on the television screen pointed by said remote control, whereby the television can display the cursor at the position on the television screen pointed by said remote control (column 30, lines 5-12). This is accomplished in real time by the following mechanism: Angle detector 140 measures the angle 141 between the base line 160 and the line connecting the angle detector 140 and the light spot 130 wherein the angle detector 150 measures the angle 151 between the base line 160 and the line connecting the angle detector 150 and the light spot 130 such that the measured angles 141 and 151, along with the distance between angle detectors 140 and 150, are input into the computer or into a dedicated Digital Signal Processor (DSP) to calculate the coordinate of the light spot 130 wherein the calculated coordinated is taken as the position of the cursor 10 (column 6, lines 57-67, figure 2).

Claim Rejections - 35 USC ' 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 8** and **9** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Fan* (U.S. 5,926,168) in view of *Hashimoto* (U.S. 5,554,980).

Regarding claims 8 and 9, in further discussion of claim 1, Fan does not teach the pointing device including an LED or laser. On the other hand, Hashimoto teaches a pointing device in the form of a remote control system comprising LEDs (12a-12e) (*see* figure 55 at 12a-12b).

Thus, it would have been obvious to a person of ordinary skill in the art to combine Fan and Hashimoto because while Fan teaches a pointing device transmits infrared or electromagnetic waves wirelessly into the computer or interactive TV 30 (column 60, lines 1-14, figure 1 at 20, 30, 40, 41), Hashimoto teaches a pointing device in the form of a remote control system comprising LEDs (12a-12e) (*see* figure 55 at 12a-12b). The motivation for combining these inventions would have been to design a scheme wherein the receiving unit 25 is able to receive the transmitted signals by the remote control unit at all times (column 9, lines 26-28).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,130,664 to *Suzuki* for an input device.

U.S. Patent 5,949,403 to *Umeda et al* for a remote coordinate designating device.

U.S. Patent 5,138,304 to *Bronson* for a projected image light pen.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Uchendu O. Anyaso

09/30/2003

STEVEN SARAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600